

## **CLAIMS**

### **What is Claimed is:**

1. A method of reinforcing a cylindrical pipeline, wherein prestressing reinforcements are placed and tensioned around the pipeline, wherein, in a zone where the pipeline has a radial projection on a first side, the prestressing reinforcements are deflected to bypass the radial projection, and wherein reinforcements located in a common layer on a second side of the pipeline opposite the first side are distributed in a plurality of layers on the first side.

2. The method as claimed in Claim 1, wherein the deflection of the reinforcements around the radial projection is obtained by means of at least one prefabricated plate having an orifice providing a passage for the radial projection and channels for guiding the reinforcements.

3. The method as claimed in Claim 2, wherein the channels for guiding the reinforcements are in the form of grooves open onto an upper face of the prefabricated plate.

4. The method as claimed in Claim 3, wherein the grooves are arranged for receiving reinforcements individually along two edges of the prefabricated plate located on either side of a mid-plane containing a longitudinal direction of the pipeline and a direction of the radial projection, and wherein the grooves merge at least in pairs in a cross-section along said mid-plane, so as to provide the plurality of reinforcements received in a merged groove with a plurality of bearing surfaces located in different layers perpendicularly to the plate.

5. The method as claimed in Claim 2, further comprising guiding the reinforcements at the entrance to the prefabricated plate so as to prevent the reinforcements from having angular points at the edge of the plate.

6. The method as claimed in Claim 2, wherein the prefabricated plate is laid onto the pipeline with a gap filled by a positioning mortar.

7. The method as claimed in Claim 2, wherein the prefabricated plate is made from cast iron.

8. The method as claimed in Claim 2, wherein the prefabricated plate is made from poured concrete.

9. The method as claimed in Claim 8, wherein the poured concrete has a compressive strength greater than 120 MPa.

10. The method as claimed in Claim 1, further comprising the following steps prior to tensioning the prestressing reinforcements:

placing a formwork in said zone of the pipeline on the first side;

positioning spacing means within said formwork to define paths in the plurality of

layers for the reinforcements; and

pouring concrete into the formwork,

the reinforcements being tensioned after the poured concrete has set.

11. The method as claimed in Claim 10, further comprising the step of arranging individual tubes in the formwork, each tube receiving a respective prestressing reinforcement.

12. Method of reinforcing a cylindrical pipeline, wherein prestressing members are installed and tensioned around the pipeline, the method comprising the steps of:

selecting a section of the pipeline to receive a radial projection on a first side of the pipeline; and

deflecting the prestressing members to guide said members off a position of the radial projection so that the prestressing members located in a common layer on a second side of the pipe opposed to the first side are distributed into a plurality of layers on the first side.

13. The method as claimed in Claim 12, wherein the deflection of the prestressing members is obtained by means of at least one prefabricated plate having an orifice providing a passage for the radial projection and channels for guiding the prestressing members.

14. The method as claimed in Claim 13, wherein the channels for guiding the prestressing members are in the form of grooves open onto an upper face of the prefabricated plate.

15. The method as claimed in Claim 14, wherein the grooves are arranged for receiving prestressing members individually along two edges of the prefabricated plate located on either side of a mid-plane containing a longitudinal direction of the pipeline and a direction of the radial projection, and wherein the grooves merge at least in pairs in a cross-section along said mid-plane, so as to provide the plurality of prestressing members received in a merged groove with a plurality of bearing surfaces located in different layers perpendicularly to the plate.

16. The method as claimed in Claim 13, further comprising guiding the prestressing members at the entrance to the prefabricated plate so as to prevent the prestressing members from having angular points at the edge of the plate.

17. The method as claimed in Claim 13, wherein the prefabricated plate is laid onto the pipeline with a gap filled by a positioning mortar.

18. The method as claimed in Claim 13, wherein the prefabricated plate is made from cast iron.

19. The method as claimed in Claim 13, wherein the prefabricated plate is made from poured concrete.

20. The method as claimed in Claim 19, wherein the poured concrete has a compressive strength greater than 120 MPa.

21. The method as claimed in Claim 12, further comprising the following steps prior to tensioning the prestressing members:

placing a formwork in said section of the pipeline on the first side;

positioning spacing means within said formwork to define paths in the plurality of layers for the prestressing members; and

pouring concrete into the formwork,

the prestressing members being tensioned after the poured concrete has set

22. The method as claimed in Claim 21, further comprising the step of arranging individual tubes in the formwork, each tube receiving a respective prestressing member.

23. Prefabricated plate having an orifice to be placed around a radial projection on a first side of a cylindrical pipeline, and channels for guiding prestressing members for said pipeline, the channels having a shape adapted to deflect the prestressing members in order to guide said members off a position of the radial projection so that the prestressing members located in a common layer on a second side of the pipe opposed to the first side are distributed into a plurality of layers on the first side.

24. The prefabricated plate as claimed in Claim 23, wherein the channels for guiding the prestressing members are in the form of grooves open onto an upper face of the prefabricated plate.

25. The prefabricated plate as claimed in Claim 13, wherein the channels for guiding the prestressing members are in the form of grooves open onto an upper face of the prefabricated plate.

26. The prefabricated plate as claimed in Claim 25, wherein the grooves are arranged for receiving prestressing members individually along two edges of the prefabricated plate located on either side of a mid-plane containing a longitudinal direction of the pipeline and a direction of the radial projection, and wherein the grooves merge at least in pairs in a cross-section along said mid-plane, so as to provide the plurality of prestressing members received in a merged groove with a plurality of bearing surfaces located in different layers perpendicularly to the plate.

27. The prefabricated plate as claimed in Claim 23, made from cast iron.

28. The prefabricated plate as claimed in Claim 23, made from poured concrete.

29. The prefabricated plate as claimed in Claim 28, wherein the poured concrete has a compressive strength greater than 120 MPa.